

Att'y Ref. No. 003-068

U.S. App. No.: 10/623,812**REMARKS**

Entry of the foregoing amendments, favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks.

Entry of Amendments

Applicant respectfully requests entry of the amendments presented herein. The foregoing amendments, by which the subject matters of Claims 2 and 8 are incorporated in Claims 1 and 7, respectively, merely place in independent form Claims 2 and 8, and therefore present no new issues whatsoever, and their entry does not require significant additional search and/or consideration. Entry of these amendments will simplify the issues in this application for allowance (or appeal), by reducing the number of claims for consideration. Inasmuch as Claims 2 and 8 were already pending, Claims 1 and 7 in the foregoing amended form have already been presented in this application, and therefore their entry does not raise any issue why they were not earlier presented.

For at least the foregoing reasons, entry of the amendments is proper and is respectfully requested.

Information Disclosure Statement (IDS)

Applicant acknowledges receipt, with the Office Action, of a partially-examiner-initialed form PTO-1449 that was part of the IDS filed on 5 September 2004. Applicant notes that two documents, namely EP 0 321 809 A1 and EP 0 704 657 A2, were stricken through and a handwritten notation “* no translation, explanation of relevance, or citation in foreign corresponding application per M.P.E.P. 609” is included on the form. Applicant respectfully requests full consideration of all of the documents cited therein, and return to Applicant of a copy of the fully-Examiner-initialed PTO-1449.

Both of the aforementioned EPO patent documents are discussed at pages 1-2 of the instant application, and therefore their citations each fully complied with 37 C.F.R. §§ 1.97, 1.98.

[Page 6 of 10]

Att'y Ref. No. 003-068

U.S. App. No.: 10/623,812

See 37 C.F.R. § 1.98(a)(3)(i).

For the foregoing reasons, Applicant respectfully requests full consideration of the two EPO documents stricken on the form PTO-1449.

Rejection under 35 U.S.C. § 102

In the Office Action, beginning at page 2, Claims 1-5 and 7-9 were again rejected under 35 U.S.C. § 102(b), as reciting subject matters that allegedly are anticipated by *Knöpfel*.

Applicant respectfully requests reconsideration of this rejection.

Applicant again notes that, by entry of the foregoing amendments, the subject matters of Claims 2 and 8 have been incorporated into Claims 1 and 7, respectively, thus presenting the subject matters of Claims 2 and 8 in independent form.

In the Response filed 6 December 2004, Applicant presented a substantive discussion and analysis of *Knöpfel*'s disclosure, which is incorporated by reference herein. In addition to those comments, Applicant has additional comments concerning *Knöpfel* and the Office Action.

The Office Action, at page 2, alleges that *Knöpfel* describes a limitation identically as recited in the combination of Claims 1 and 7, stating:

a cavity arranged between the swirl generator and the combustion chamber in which a secondary flow an [sic: can] be produced (please see column 4 lines 1-36). *Knöpfel* is also considered to disclose the claimed toroidal shape, as shown in figure 2, injection means 17, and mixing section arrangements (column 3 line 29).

Applicant strongly disagrees.

Claim 1 relates to a burner having a combination of elements including, *inter alia*:
a swirl generator for a combustion-air flow;
a combustion chamber arranged downstream of the swirl generator; and
an annular toroidal cavity arranged between the swirl generator and the combustion chamber.

[Page 7 of 10]

Att'y Ref. No. 003-068

U.S. App. No.: 10/623,812

Claim 7 relates to a pilot burner having a combination of elements including, *inter alia*: an annular toroidal cavity arranged between a swirl generator and a combustion chamber.

As discussed by Applicant in the 6 December Response, *Knöpfel* fails to identically disclose or describe combinations as recited in the pending claims. *Knöpfel*'s burner, see Figs. 1 and 2, includes in the direction of flow:

- a swirl generator 10;
- a mixing section 20; and
- a combustion chamber 30.

As reproduced above, the Office Action alleges that the offset double-cone configuration of *Knöpfel*'s swirl generator 10 is read on by the 'annular toroidal cavity' recited in the combinations of Claims 1 and 7 (previously Claims 2 and 8). Nowhere does the Office Action allege, and indeed *Knöpfel*'s disclosure would not support such an allegation, that any annular toroidal cavity that may be described by *Knöpfel* is positioned "between the swirl generator and the combustion chamber" as recited in the pending claims. Rather, the structures or spaces alleged in the Office Action to correspond to the claimed annular toroidal cavity are part of *Knöpfel*'s swirl generator, and therefore cannot be "between the swirl generator and the combustion chamber". The Office Action has not identified any other structure or space described in *Knöpfel* that can be read on by the claimed combinations' cavity.

Mixing section 20 of *Knöpfel* is clearly a tube, and is not annular or toroidal. Applicant has not in this application imposed a definition of those terms such that a "tube" such as *Knöpfel*'s mixing section 20 could be considered to be "annular" or "toroidal". If Mr. Gravini's position is somehow different, he is respectfully requested to provide a detailed explanation how and why these simple terms could be construed other than the way Applicant plainly uses them.

Accordingly, the Office Action fails to make out a *prima facie* case that *Knöpfel* describes a device including each and every element recited in the combinations of Claims 1, 3-5, 7, and 9. *Knöpfel* therefore cannot anticipate the subject matters of these claims.

For at least the foregoing reasons, Applicant respectfully submits that the subject matters of Claims 1, 3-5, 7, and 9 are not anticipated by *Knöpfel*, are therefore not unpatentable under 35

Att'y Ref. No. 003-068

U.S. App. No.: 10/623,812

U.S.C. § 102, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 102.

Rejection under 35 U.S.C. § 103(a)

In the Office Action, beginning at page 2, Claim 6 was rejected under 35 U.S.C. § 103(a), as reciting subject matter that allegedly is obvious, and therefore allegedly is unpatentable, over *Knöpfel* in view of *Büchner*. Applicant respectfully requests reconsideration of this rejection.

Applicant incorporates by reference the discussions of the rejection of Claim 6 under section 103(a) presented in the 6 December 2004 Response.

For at least the foregoing reasons, Applicant respectfully submits that the subject matter of Claim 6, taken as a whole, would not have been obvious to one of ordinary skill in the art at the time of Applicant's invention, is therefore not unpatentable under 35 U.S.C. § 103(a), and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 103(a).

Conclusion

Applicant respectfully submits that the present patent application is in condition for allowance. An early indication of the allowability of this patent application is therefore respectfully solicited.

If Mr. Gravini believes that a telephone conference with the undersigned would expedite passage of this patent application to issue, he is invited to call on the number below.

Att'y Ref. No. 003-068

U.S. App. No.: 10/623,812

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. If, however, additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and the Commissioner is hereby authorized to charge fees necessitated by this paper, and to credit all refunds and overpayments, to our Deposit Account 50-2821.

Respectfully submitted,

By: 

Adam J. Cermak
Registration No. 40,391

U.S. P.T.O. Customer Number 36844
Cermak & Kenealy LLP
515 E. Braddock Rd., Suite B
Alexandria, Virginia 22314

703.778.6607
703.652.5101 (f)

Date: 20 May 2005